

WHAT IS CLAIMED IS:

1. An image sensing system where a camera apparatus  
and a client device are connected for controlling the  
5 camera apparatus by the client device, comprising:
  - image sensing means for sensing an object and  
obtaining an image signal thereof;
  - detection area control means for controlling a  
detection area in the image signal;
  - 10 adjusting means for adjusting a camera parameter  
based on an image signal of the detection area;
  - storage means for storing a shape and size of the  
detection area;
  - display means for superimposing the detection area  
15 on an image obtained by said image sensing means after  
said adjusting means adjusts the camera parameter, based  
on the position, shape and size of the detection area;  
and
  - shift instructing means for instructing said  
20 detection area control means to shift the detection area.
2. The image sensing system according to claim 1,  
wherein the camera apparatus comprises said image  
sensing means, said detection area control means and  
25 said adjusting means; and the client device comprises  
said shift instructing means, said storage means and

said display means.

3. The image sensing system according to claim 1,  
wherein said adjusting means includes focal point  
5 adjusting means for automatically adjusting a focal  
point based on the image signal of the detection area.

4. The image sensing system according to claim 3,  
wherein said adjusting means further comprises exposure  
10 adjusting means for automatically adjusting an exposure  
based on the image signal of the detection area.

5. The image sensing system according to claim 2,  
wherein said shift instructing means outputs data  
15 related to an amount of shift of the detection area to  
the camera apparatus.

6. The image sensing system according to claim 5,  
wherein said shift instructing means instructs to shift  
20 the detection area displayed on said display means.

7. The image sensing system according to claim 2,  
said camera apparatus further comprising:

position data output means for outputting position  
25 data of the detection area to said client device; and  
image signal output means for outputting an image

signal sensed by said image sensing means to said client device.

8. The image sensing system according to claim 7,  
5 wherein said camera apparatus further comprises  
parameter output means for outputting current camera  
parameter data to said client device.

9. The image sensing system according to claim 8,  
10 wherein said display means displays the camera parameter  
data outputted by said parameter output means.

10. The image sensing system according to claim 8,  
wherein the parameter data includes at least one of  
15 focused position, shutter speed, a value of aperture  
stop, gain and zoom ratio.

11. The image sensing system according to claim 1,  
wherein said storage means respectively stores shapes  
20 and sizes of detection areas corresponding to different  
specifications of the camera apparatus.

12. The image sensing system according to claim 11,  
wherein said display means displays the detection area  
25 in accordance with a specification of the camera  
apparatus by referring to said storage means.

13. The image sensing system according to claim 1,  
wherein said camera apparatus is an electronic overhead  
projector (OHP) which senses an object placed on a  
5 platen.

14. The image sensing system according to claim 13,  
wherein the object is three-dimensional.

10 15. An image sensing system where a camera apparatus  
and a client device are connected for controlling the  
camera apparatus by the client device, comprising:

image sensing means for sensing an object and  
obtaining an image signal of the object;

15 detecting means for detecting an image signal of a  
detection area in the obtained image signal;

adjusting means for adjusting a camera parameter  
based on the image signal of the detection area;

20 storage means for storing the image signal of the  
detection area sensed by said image sensing means after  
said adjusting means adjusts the camera parameter;

shifting means for shifting the detection area;  
and

25 image synthesizing means for synthesizing image  
signals of a plurality of detection areas stored in said  
storage means.

16. The image sensing system according to claim 15,  
wherein said adjusting means automatically adjusts a  
focal point based on the image signal of the detection  
5 area.

17. The image sensing system according to claim 15,  
further comprising display means for displaying an image  
synthesized by said image synthesizing means.

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18. The image sensing system according to claim 15,  
wherein in a case where all images of the object sensed  
by said image sensing means are stored in said storage  
means, said image synthesizing means synthesizes the  
15 images of all detection areas stored in said storage  
means.

19. The image sensing system according to claim 15,  
wherein said storage means stores only image signals of  
20 an effective area in the detection area, and said image  
synthesizing means synthesizes images of a plurality of  
the effective areas stored in said storage means.

20. The image sensing system according to claim 19,  
25 wherein the effective area is a central area of the  
detection area.

21. The image sensing system according to claim 19,  
wherein said shifting means shifts the detection area  
such that the effective areas are not overlapped.

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22. The image sensing system according to claim 15,  
further comprising direction control means for  
controlling an image sensing direction of said image  
sensing means,

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wherein said synthesizing means synthesizes images  
in unit of the image sensing direction controlled by  
said direction control means.

23. The image sensing system according to claim 22,  
15 wherein said direction control means pans the image  
sensing direction by  $90^\circ$  .

24. The image sensing system according to claim 22,  
wherein said direction control means tilts the image  
20 sensing direction by  $90^\circ$  .

25. The image sensing system according to claim 22,  
wherein said direction control means controls the image  
sensing direction such that the image sensing direction  
25 is panned in four directions and tilted in one direction.

26. A control method of an image sensing system where a camera apparatus and a client device are connected for controlling the camera apparatus by the client device, comprising:

5 a first image sensing step of sensing an object by image sensing means and obtaining an image signal of the object;

a detection area control step of controlling a detection area in the image signal;

10 an adjusting step of adjusting a camera parameter based on an image signal of the detection area;

a second image sensing step of sensing the object by the image sensing means after the camera parameter is adjusted in said adjusting step;

15 a display step of superimposing the detection area on an image sensed in said second image sensing step, based on a position, shape and size of the detection area stored in storage means in advance; and

a shift instructing step of instructing to shift  
20 the detection area.

27. A control method of an image sensing system where a camera apparatus and a client device are connected for controlling the camera apparatus by the client device,  
25 comprising:

a first image sensing step of sensing an object by

image sensing means and obtaining an image signal of the object;

a detecting step of detecting an image signal of a detection area in the obtained image signal;

5 an adjusting step of adjusting a camera parameter based on the image signal of the detection area;

a second image sensing step of sensing the object by the image sensing means after the camera parameter is adjusted in said adjusting step;

10 a storing step of storing, in storage means, the image signal of the detection area sensed in said image sensing step;

a shifting step of shifting the detection area;  
and

15 an image synthesizing step of synthesizing images of a plurality of detection areas stored in said storage means.

28. A recording medium including program codes for  
20 processing performed by a client device of an image sensing system where a camera apparatus and a client device are connected for controlling the camera apparatus by the client device, said program codes comprising:

25 codes for an input step of inputting data for a detection area, which is referred to when a camera



parameter is adjusted, in an image signal obtained by sensing an object by image sensing means of the camera apparatus;

5 codes for a display step of superimposing the detection area on an image sensed by the image sensing means, based on a position, shape and size of the detection area stored in storage means in advance; and

codes for a shift instructing step of instructing the camera apparatus to shift the detection area.

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29. A recording medium including program codes for processing performed by a client device of an image sensing system where a camera apparatus and a client device are connected for controlling the camera apparatus by the client device, said program codes comprising:

15 codes for a detecting step of detecting an image signal of a detection area, which is referred to when a camera parameter is adjusted, in an image signal obtained by sensing an object by image sensing means of the camera apparatus;

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codes for a storing step of storing, in storage means, the image signal of the detection area;

25 codes for a shifting step of shifting the detection area; and

codes for an image synthesizing step of

synthesizing images of a plurality of detection areas  
stored in said storage means.

30. A camera control apparatus for controlling a  
5 camera apparatus having:

image sensing means;

detection area control means for controlling a  
detection area in an image signal outputted by the image  
sensing means; and

10 adjusting means for adjusting a camera parameter  
based on an image signal of the detection area,

said camera control apparatus comprising:

display means for displaying an image sensed  
by the camera apparatus;

15 obtaining means for obtaining a shape and  
size of the detection area from the camera apparatus;

detection area display means for  
superimposing the detection area on the image displayed  
by said display means, based on the shape and size of  
20 the detection area obtained by said obtaining means; and

shift instructing means for instructing said  
detection area control means to shift the detection area.

31. A camera control method of controlling a camera  
25 apparatus having:

image sensing means;

detection area control means for controlling a  
detection area in an image signal outputted by the image  
sensing means; and

adjusting means for adjusting a camera parameter  
5 based on an image signal of the detection area,

said camera control method comprising:

an image display step of displaying an image,  
sensed by the camera apparatus, on display means  
included in a camera control apparatus;

10 an obtaining step of obtaining a shape and  
size of the detection area from the camera apparatus;

a detection area display step of  
superimposing the detection area on the image displayed  
on the display means, based on the shape and size of the  
15 detection area obtained in said obtaining step; and

a shift instructing step of instructing to  
shift the detection area.

32. A recording medium including program codes to be  
20 performed by a camera control apparatus for controlling  
a camera apparatus having image sensing means, detection  
area control means for controlling a detection area in  
an image signal outputted by the image sensing means and  
adjusting means for adjusting a camera parameter based  
25 on an image signal of the detection area, said program  
codes comprising:

codes for an image display step of displaying an image, sensed by the camera apparatus, on display means included in the camera control apparatus;

5 codes for an obtaining step of obtaining a shape and size of the detection area from the camera apparatus;

10 codes for a detection area display step of superimposing the detection area on the image displayed on the display means, based on the shape and size of the detection area obtained in said obtaining step; and

codes for a shift instructing step of instructing to shift the detection area.